

alone the views and observations of Senn, but presents in a condensed form the modern ideas from the most recent literature on the tuberculosis of the bones and joints. Its richness with references to the literature on the subject makes it a valuable book of reference as well as a hand-book for every-day practice. The fact that the author is not only a surgeon but a pathologist as well, is amply evidenced in its every chapter. Productions of this sort are the instruments which are winning for the American scientific literature the standing which ere-long it is destined to attain. It is for the American profession to congratulate and thank the author for having produced a work of such scientific value.

JAMES P. WARBASSE.

DIE MIKROÖRGANISMEN DER MUNDHÖHLE. Die örtlichen und allgemeinen Erkrankungen welche durch dieselben hervorgerufen werden von W. D. MILLER, Dr. Med. et Phil., Professor am Zahnärztlichen Institute der Universität, Berlin. Mit 134 Abbildungen im Texte, und 18 Photogrammen. Zweite Auflage. 8vo, pp 448. Leipzig: Verlag von Georg Thieme, 1892.

"The micro-organisms of the oral cavity" is the title of one of the most recent German publications. The book is a systematic compilation of the essentials of numerous published monographs, as well as the results of the author's many original investigations.

The first chapters are general in their scope, and give a synopsis of the methods of bacterial investigation. The form, the mode of propagation, the way in which by their own activity they are self-destructive, and the influence of bacteria upon living, as well as upon lifeless material, are all the subjects of interesting paragraphs. The history of the discovery of ptomaines, and the distinction between ptomaines, toxalbumines and leucomaines form a valuable section of this portion of the book.

With these general discussions as a basis the author confines his attention in the balance of the work to the bacteria found in the mouth, and growing in the nutrient media furnished by the saliva, mucus, desquamated epithelial cells, teeth, and the remnants of food.

Several chapters are devoted to the important subject of dental caries. The various theories which have been formulated as to the causes of this pathological condition, such as the one held by some that worms living in the gums produce the disease, or the equally amusing theory of the powerful electric currents existing between the crown and roots of each tooth, together with many others, form an entertaining chapter. Dr. Miller's personal views are best given by the following quotation: "Our knowledge of the micro-organisms which are concerned in caries of the teeth is even yet incomplete. The important fact has been determined, however, that all micro-organisms of the oral cavity which possess the ability to cause an acid fermentation from remnants of food can take part in the first stage of dental caries; further that all micro-organisms possessing a peptonizing or digestive action upon albuminous material can take part in the second stage (*i. e.* the dissolution of the substance of the teeth), and that finally all those which possess both characteristics are active at the same time in both stages." The personal investigations of the author which have led him to support this belief have been extensive and thorough. Full details of them are given. The technique of this rather difficult field of microscopical study is fully and clearly described, and these sections are of special value to a student. Among other examples cited is the fact that bakers are so subject to caries as to cause this especial form to be called "Baker's caries." Also the results of an examination of numerous skulls which show that those races which subsist upon meats chiefly (*e. q.* Eskimos) are practically free from caries (only two per cent.) while vegetarian races (*e. q.* Chinese) are extraordinarily affected (forty per cent.)

Prophylaxis and the use of antiseptic tooth washes are carefully considered, as well as the relative value of sterilization methods as applied to surgical instruments.

The second section is devoted to the pathogenic bacteria which have been found to exist in the mouth. Each in turn is made the subject of a description embodying all the facts known at the present day of its life history. Following these is a chapter devoted to the various diseases of the lungs, intestinal tract, etc., caused by these

various mouth bacteria. The value of this entire section is enhanced by the illustrations which are numerous and good.

The book is a valuable accession to any medical library; for the bacteriologist the latest methods of investigation and of technique are described; for the surgeon the means of sterilization and the experiments as to the relative value of antiseptics, are of value; especially for the dentist the comprehensive discussion of caries renders it worthy of careful attention.

H. P. DE FOREST.

TEXT-BOOK OF NERVOUS DISEASES. By C. L. DANA, A. M., M. D., pp. 524. New York: WM. WOOD & CO., 1892.

A highly creditable and pleasantly elaborate treatise. There will be always a demand for such thorough treatises as this of Dana.

The general plan of the book would, however, we hold, be more acceptable if, in the presence of Edinger's and of Herter's new work, normal neurology, anatomical and physiological, were elided and the whole space utilized for the main purpose. But necessarily it is a compilation, and as such there may well be differences of opinion as to plan and even to authorities.

Dr. D.'s zeal is so well known, his standing as a neurologist is so secure, and his reputation in any case will be so far enhanced by a work of such general excellence as that under notice, that gentle criticism will be a greater honor than exuberant adulation.

There are many casual matters that might receive mention if space permitted.

Evidently he is somewhat enamored of athetosis, from the presence of two illustrations (pp. 19 and 366), the more so as this is only a special manifestation of hemiplegic chorea;—justifiable perhaps as a personal compliment to Hammond.

For an exact estimate of the trustworthiness of a work, a reviewer naturally turns to fields with which he is most familiar or that have particularly interested him.

To bulbar paralysis D. gives two pages, but dismisses the equally frequent pseudo-bulbar with a line, attributing it to "chronic lesions of the cerebral hemispheres," and mentions certain signs as "always